WE CLAIM:

1. A protein produced by an epithelial cell and having epithelial cell growth inhibitory properties, the protein having a molecular weight of approximately 50-60 kilodaltons.

2. The protein of claim 1, wherein the epithelial cells are central nervous system, heart, small intestine, large intestine, appendix, rectum, lymphatic cells, bone marrow cells, lung and air passages, bladder, uterus, prostate, testis, ovary, liver, pancreas, adrenal gland, salivary gland, and mammary gland.

3. The protein of claim 1, wherein the epithelial cells are colon, ovary, prostate, spleen, testis, or thymus cells.

4. The protein of claim 1, wherein the protein is encoded by a nucleic acid sequence having substantial identity over at least one third of a nucleic acid sequence selected from Seq ID Nos: 1, 2, 3, and 4.

5. The protein of claim 1, wherein the protein is specifically recognized by the anti-mammastatin antibody, 7G6.

6. A nucleic acid sequence comprising SEQ ID NOs: 1, 2, 3, 4, or a nucleic acid sequence having substantial identity over at least one third of the sequence with SEQ ID NOs: 1, 2, 3, or 4.

7. A method for detecting epithelial cell cancer, comprising:

analyzing body fluid for the presence or amount of the protein of claim 1; and

correlating a reduction or absence of said protein with epithelial cell cancer.

8. A method for treating epithelial cell cancer in a patient comprising:

administering to the patient the protein of claim 1.

9. A diagnostic kit comprising:

the protein of claim 1 and an antibody that specifically binds the protein of claim 1.

10. The diagnostic kit of claim 9, wherein the antibody is 7G6.